ORDER NO. SD83072612C8

Service Manual

MONITOR 2

Honeycomb Disc Speaker System

SB-M2 (S)

[E], [XA]

* This model has for Right and Left type.
* The Silver type model is indicated by (S) in the Service Manual.

Areas

* [E] is available in Scandinavia and Switzerland.
* [XA] is available in Southeast Asia, Oceania, Africa, Middle Near East and Central South America.

Specifications

(Specifications are subject to change without notice for further improvement.)

Type:	3way 3speaker system
Speakers:	Woofer: 38 cm Honeycomb Disc Midrange: 8 cm, Honeycomb Disc Tweeter: 2.8 cm, Honeycomb Disc
Impedance:	6 ohms
Input Power:	300 W, Music 130 W, DIN
Output Sound Pressure Level:	92 dB/W (1.0 m)
Crossover Frequency:	750 Hz, 4,000 Hz
Frequency Range:	27 Hz ~ 38 kHz (−16 dB) 35 Hz ~ 35 kHz (−10 dB)
Dimensions:	54.0(W) x 82.0(H) x 41.5(D) cm
Weight:	50.0 kg

CARACTERISTIQUES

(Sujet à changement sans préaris.)

Type:	3 voies, 3 haut-parleurs
Haut-parleurs:	graves: 38 cm, disque alvéolé moyennes: 8 cm, disque alvéolé aigus: 2,8 cm, disque alvéolé
Impédance:	6 ohms
Puissance d'entrée:	300 watts, musique 130 watts, DIN
Niveau de pression sonore de sortie:	92 dB/W (1,0 m)
Fréquence de commutation:	750 Hz, 4.000 Hz
Gamme de fréquences:	27 Hz ~ 38 kHz (−16 dB) 35 Hz ~ 35 kHz (−10 dB)
Dimensions:	54,0(l) x 82,0(h) x 41,5(p) cm
Poids:	50,0 kg

TECHNISCHE DATEN

(Spezifikationen können infolge von Verbesserungen ohne Ankindigung geändert werden.)

Typ:	3-Weg-System mit 3
Lautsprecher:	Tieftonlautsprecher: 38 cm, Wabenscheibe Mitteltonlautsprecher: 8 cm, Wabenscheibe Hochtonlautsprecher: 2,8 cm, Wabenscheibe
Impedanz:	6 Ohm
Belastbarkeit:	300 Watt Musik 130 Watt DIN
Abgegebener Schalldruckpegel:	92 dB/W (in 1,0 m Abstand)
Überschneidung-frequenz:	750 Hz, 4.000 Hz
Frequenzbereich:	27 Hz ~ 38 kHz (−16 dB) 35 Hz ~ 35 kHz (−10 dB)
Abmessungen:	54,0(B) x 82,0(H) x 41,5(T) cm
Gewicht:	50,0 kg

ESPECIFICACIONES

(Estas especificaciones están sujetas a cualquier cambio sin previo eviso.)

Tipo:	Sistema de con 3 altoparlantes bidireccionales
Altoparlantes:	"Woofer": disco en forma de panal de abeja, de 38 cm "Gama media": disco en forma de panal de abeja, de 8 cm "Tweeter": disco en forma de panal de abeja, de 2,8 cm
Impedancia:	6 ohmios
Potencia de entrada:	300 W, muásica 130 W, DIN
Nivel de presión acuástica de stalida:	92 dB/W (1,0 m)
Frecuencia de cruce:	750 Hz, 4.000 Hz
Alcance de frecuencia:	27 Hz ~ 38 kHz (−16 dB) 35 Hz ~ 35 kHz (−10 dB)
Dimensiones:	54,0(ancho) x 82,0(alto) x 41,5(prof.) cm
Peso:	50,0 kg

Technics

Matsushita Electric Trading Co., Ltd.
P.O. Box 288, Central Osaka Japan

■ SERVICING METHOD

● **How to remove the attenuator knob. (Fig. 1)**

1. Prepare a strong thin thread of about 30 cm long.
2. Push the thread in between the plate and knob by use of an eyeleteer or like. **(Fig. 1-A)**
3. Let the thread be caught, then pull it to remove the knob. **(Fig. 1-B)**
4. Remove the nuts, and the attenuator, inserting the hands into the holes of the woofer and midrange.

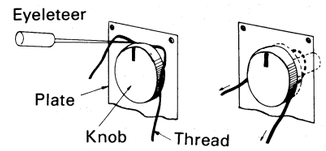


Fig. 1

● **How to remove the midrange punching net. (Fig. 2)**

1. Release the periphery of the punching net by use of an eyeleteer or the like to remove the punching net.
2. To set it in place, fit the rubber to the punching net and stick it to the frame.

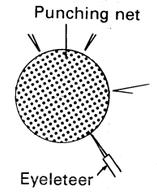


Fig. 2

● **How to remove the speaker**

1. Face the speaker side (front) up. **(Fig. 3)**
2. Remove the 4 setscrews of the tweeter and midrange, and the 8 setscrews of the woofer, then pull out the lead wires.
   (For the setscrew position, refer to the development drawing.)
   *Carefully handle the speaker because it is heavy.
3. Set up the speaker with the terminal position down.

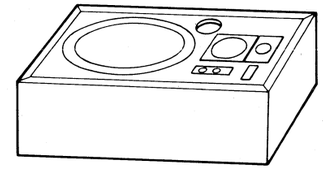


Fig. 3

	Woofer	Midrange	Tweeter
⊕Terminal Lead	Red lead	Orange lead	Yellow lead
⊖Terminal Lead	White lead	Blue lead	Black lead
Terminal Position	UP	DOWN	UP

● **Replacement of the attenuator volume**

1. Remove the 4 screws ❶ from the attenuator panel, and pull out the 2 knobs as in Fig. 4.
2. Remove the nuts, and washers, then pull out the attenuator volume backward, inserting the hands into the holes of the woofer and midrange.
3. To set it in place, fit the metal piece in the positioning hole of the cabinet, and then properly shift the volume shaft so that it is centered through temporary tightening.
   *To prevent air leakage, fill the positioning hole with bond.

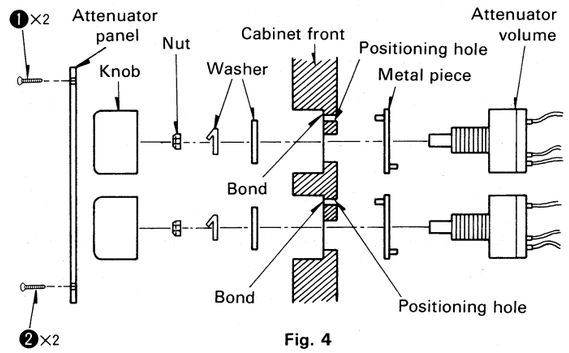
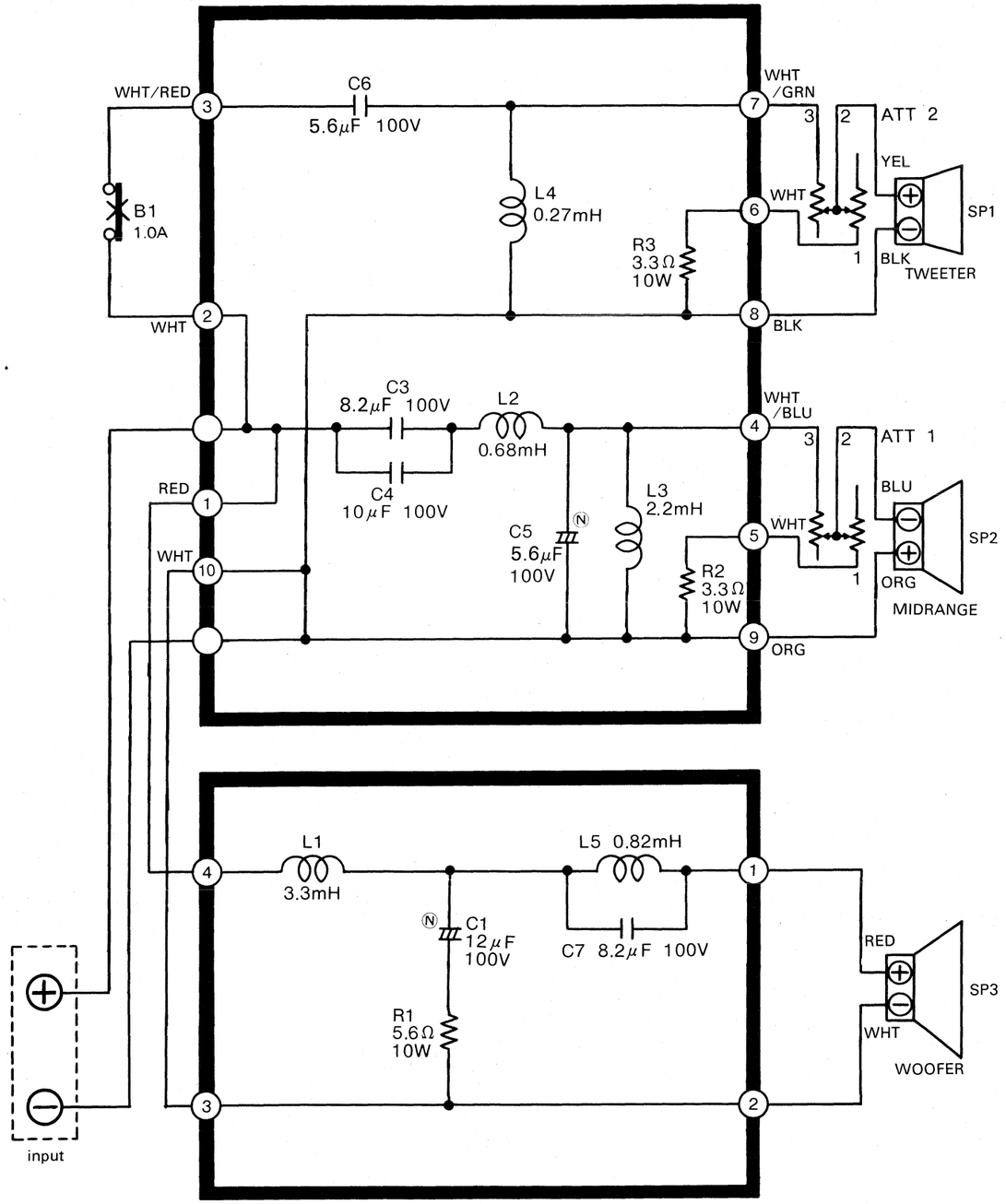


Fig. 4

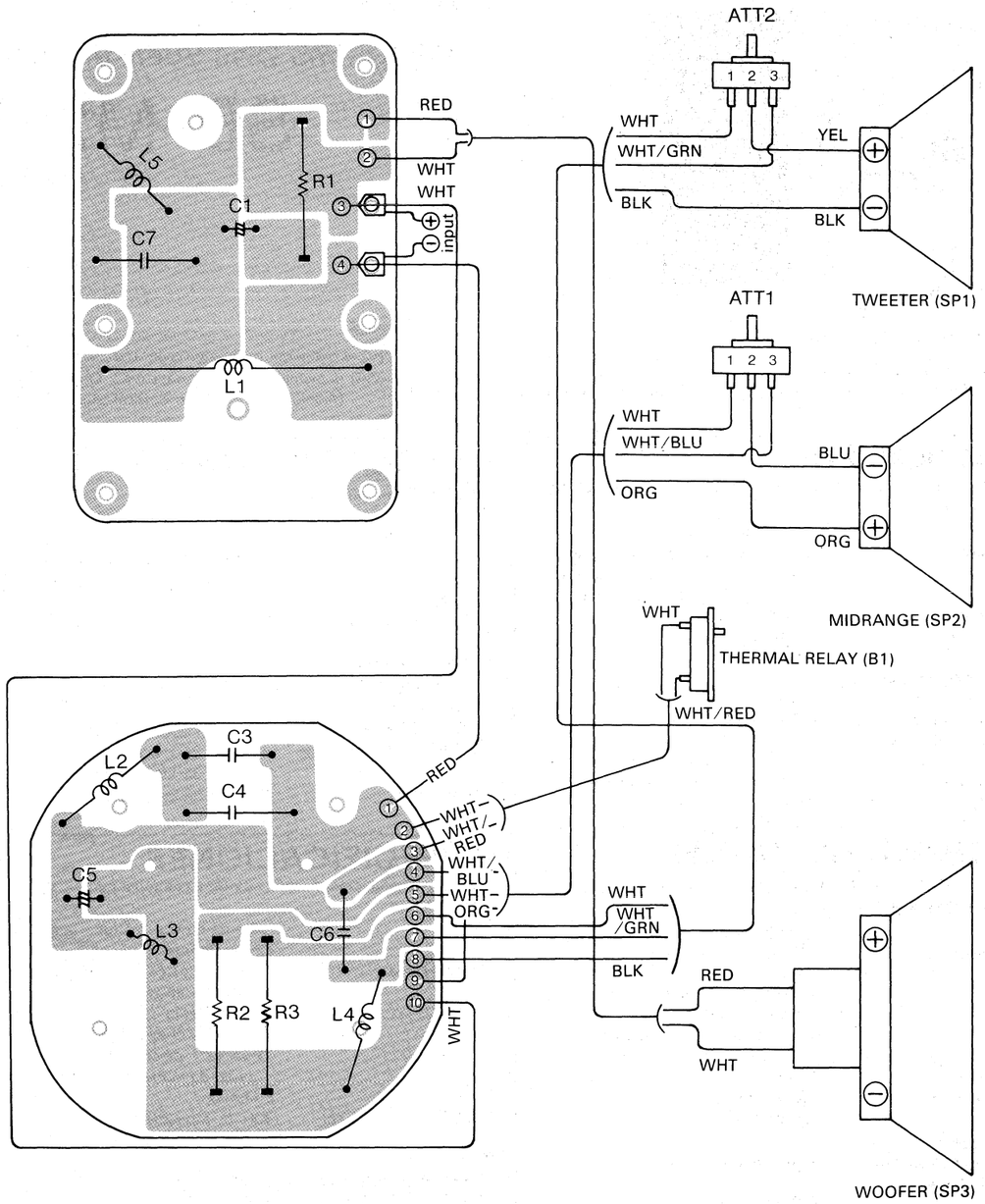
■ SCHEMATIC DIAGRAM

(This schematic diagram may be modified at any time with the development of new technology.)

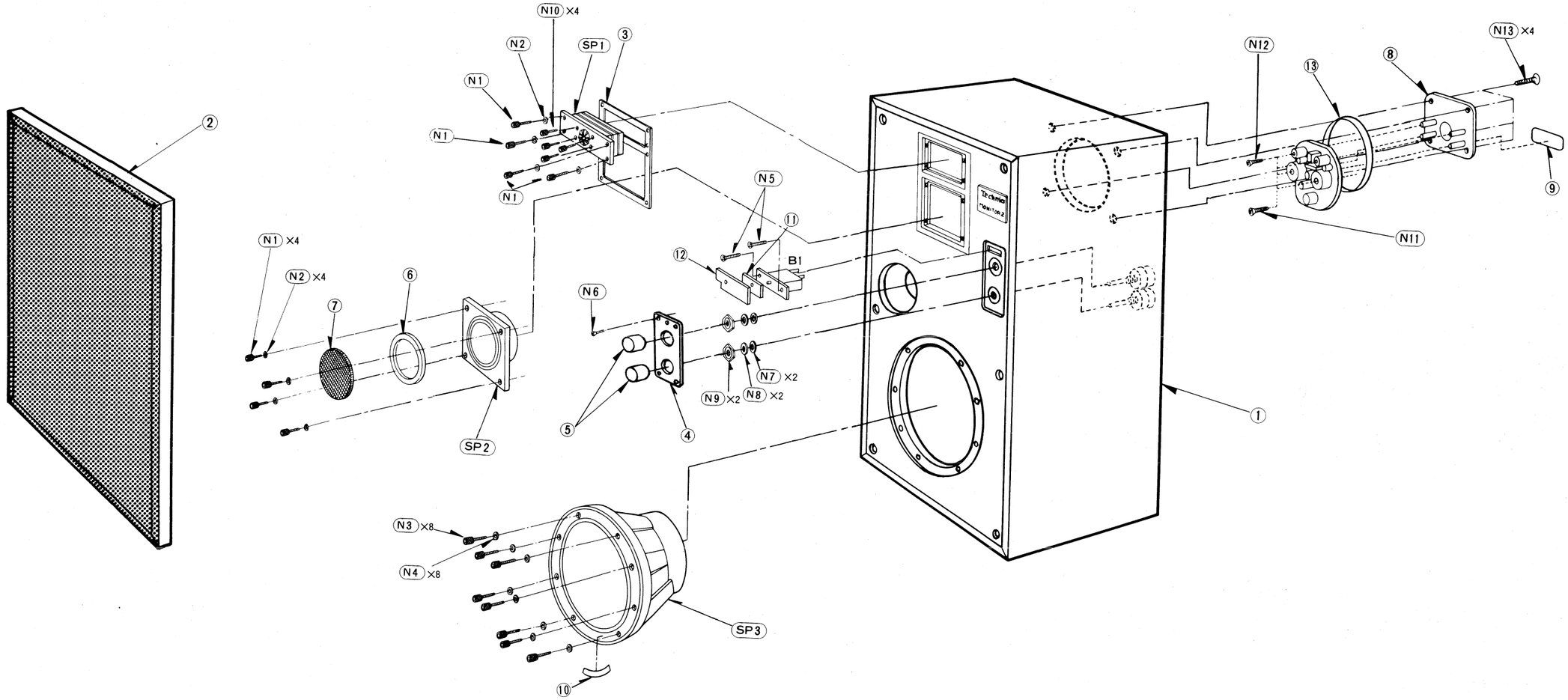


Ⓝ : Non Polar Capacitor

■ CIRCUIT BOARD AND WIRING CONNECTION DIAGRAM



■ EXPLODED VIEW



■ REPLACEMENT PARTS LIST

Notes: 1. Part numbers are indicated on most mechanical parts. Please use this part number for parts orders.

2. The parenthesized numbers in columns of description stand for the quantity per set.

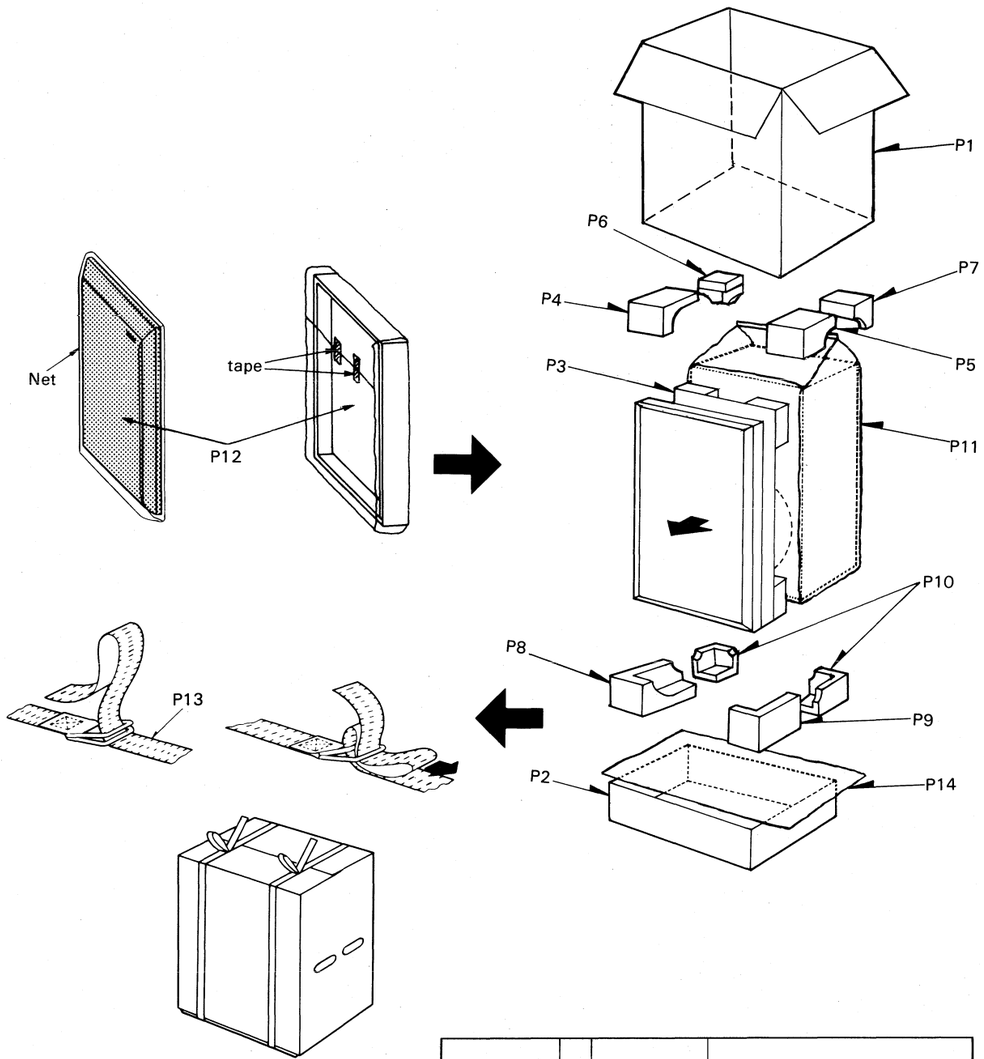
Ref. No.		Part No.	Part Name & Description
SPEAKERS			
SP1		SASS3PHM2T	Tweeter
SP2		EAS12PM216S	Midrange
SP3		EAS38PL32S	Woofer
COILS			
L1		SLCSG332JU	3.3 mH
L2		SLCSA681J	0.68 mH
L3		SLCSA222K	2.2 mH
L4		SLCSA271K	0.27 mH
L5		SLCSB821KU	0.82 mH
CAPACITORS			
C1		ECEA100Y12K	12 μF, 100V
C3		ECQE1825KN	8.2 μF, 100V
C4		ECQE1106KN	10 μF, 100V
C5		ECEA100Y5R6K	5.6 μF, 100V
C6		ECQE1565KN	5.6 μF, 100V
C7		ECQE1825KN	8.2 μF, 100V

Ref. No.		Part No.	Part Name & Description
RESISTORS			
R1		ERF10ZXK5R6	5.6Ω 10W
R2, R3		ERF10ZXK3R3	3.3Ω 10W
BREAKER			
B1		SSBS10AB02-2	Thermal Relay 1.0A
ATTENUATORS			
ATT1, 2		SRES3	Attenuator

Ref. No.		Part No.	Part Name & Description	
CABINET PARTS				
1		SKABM2SRN	Cabinet, (Right)	(1)
1		SKABM2SLN	Cabinet, (Left)	(1)
2		SYBS114	Grill, (Right)	(1)
2		SYBS114-1	Grill, (Left)	(1)
3		SHRS9050	Spacer, Tweeter, Midrange	(1)
4		SGKS145	Panel, Attenuator	(1)
5		SBN931-4	Knob, Attenuator	(2)
6		SGES94	Spacer, Midrange	(1)
7		SGMS23	Cover, Midrange	(1)
8		SJFS4210	Terminal Ass'y	(1)
9		SGTS184	Name Plate	(1)
10		SGKS113	Label, Woofer	(1)
11		SHRS9055	Spacer, Thermal relay	(1)
12		SHRS9053	Spacer, Thermal relay	(1)
13		SHRS9076	Spacer, Terminal	(1)

Ref. No.		Part No.	Part Name & Description	
SCREWS & WASHERS				
N1		XVESS6B30FG	Screw, Tweeter, Midrange	(8)
N2		XWA6BFZ	Washer, Tweeter, Midrange	(8)
N3		XVESS8B35FG	Screw, Woofer	(8)
N4		XWA8BFZ	Washer, Woofer	(8)
N5		XMS27+13	Thermal relay	(2)
N6		XMSSS35+D16G	Attenuator Panel	(4)
N7		XWG9E15FZ	Washer, Attenuator Volume	(2)
N8		XWV9FZ	Washer, Attenuator Volume	(2)
N9		XNGX9CFZ	Nut, Attenuator Volume	(2)
N10		XVESS4B6FG	Screw, Tweeter	(4)
N11		XTB4+35B	Screw, Coil	(3)
N12		XTB4+16B	Screw, Coil	(1)
N13		XMS31+D16FZ	Screw, Terminal Ass'y	(4)
ACCESSORIES				
A1		SQFS244	Instruction Book	(1)
A2		SWXS200-1	Speaker Cord	(1)

■ PACKING



Ref. No.		Part No.	Part Name & Description	
PACKING PARTS				
P1		SPGS188-3	Carton Box	(1)
P2		SPSS6218	Bottom Case	(1)
P3		SPSS6219	Pad, Net	(1)
P4		SPSS1042	Pad, Top (left)	(1)
P5		SPSS1042-1	Pad, Top (right)	(1)
P6		SPSS1043	Pad, Top (left)	(1)
P7		SPSS1043-1	Pad, Top (right)	(1)
P8		SPSS1044	Pad, Bottom (left)	(1)
P9		SPSS1044-1	Pad, Bottom (right)	(1)
P10		SPSS1045	Pad, Bottom (Rear)	(2)
P11		SPPS27	Polyethylene Bag	(1)
P12		SPPS26	Polyethylene Bag, Net	(1)
P13		SPES9	Belt	(2)
P14		SPHS6051	Sheet	(1)

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